IN THE CLAIMS:

Please amend the claims as follows. The claims are in the format as required by 35 C.F.R. § 1.121.

1.   (Currently amended) A system for graphically displaying interaction data between items in a retail setting, for various retailing-related activities, the system comprising:

a general purpose computer having memory capable of operating pursuant to instructions comprising an algorithm, wherein the algorithm further comprises the steps of:

loading ~~the~~ an interaction metric between retail items into memory;

optimizing placement of nodes and edges pursuant to the interaction metric, wherein nodes represent retail items and edges represent interactions between retail items; and

generating a graphical representation of the nodes and edges with corresponding interaction metrics.

2.   (Original) The system for graphically displaying and optimizing interaction data according to Claim 1; wherein the interaction metric is a conditional probability.

3.   (Original) The system for graphically displaying and optimizing interaction data according to Claim 1; wherein the interaction metric is based on correlations between items.

4.   (Original) The system for graphically displaying and optimizing interaction data according to Claim 1; wherein the interaction metric comprises at least one of a cross-elasticity and cross-correlation between two different variables.

5.   (Previously Presented) The system for graphically displaying and optimizing interaction data according to Claim 1; wherein the optimum placement of nodes and edges adheres to at least one of minimizing number of crossings between edges, distance between linked nodes is minimized, graph area is minimized, horizontal and vertical symmetries are

maximized, and an angle between two edges onto a node is greater than or equal to a predetermined constant.

6.   (Original) The system for graphically displaying and optimizing interaction data according to Claim 1, wherein if the interaction metric is below a predetermined threshold the interaction between at least one of the below-threshold item and an edge is not graphically displayed.

7.   (Original) The system for graphically displaying and optimizing interaction data according to Claim 2, wherein if the interaction metric is below a predetermined threshold the interaction between at least one of the below-threshold item and an edge is not graphically displayed.

8.   (Original) The system for graphically displaying and optimizing interaction data according to Claim 4, wherein if the interaction metric is below a predetermined threshold the interaction between at least one of the below-threshold item and an edge is not graphically displayed.

9.   (Original) The system for graphically displaying and optimizing interaction data according to Claim 5, wherein if the interaction metric is below a predetermined threshold the interaction between at least one of the below-threshold item and an edge is not graphically displayed.

10.   (Previously Presented) The system for graphically displaying and optimizing interaction data according to Claim 2; wherein the optimum placement of nodes and edges adheres to at least one of minimizing number of crossings between edges, distance between linked nodes is minimized, graph area is minimized, horizontal and vertical symmetries are maximized, and an angle between two edges onto a node is greater than or equal to a predetermined constant.

11.   (Previously Presented) The system for graphically displaying and optimizing interaction data according to Claim 4; wherein the optimum placement of nodes and edges adheres to at least one of minimizing number of crossings between edges, distance between linked nodes is minimized, graph area is minimized, horizontal and vertical symmetries are maximized, and an angle between two edges onto a node is greater than or equal to a predetermined constant.

12.   (Currently amended) A system for graphically displaying and optimizing interaction data between items in a retail setting, the system comprising:

a general purpose computer having memory capable of operating pursuant to instructions from an algorithm, wherein the algorithm further comprises the steps of:

means for loading ~~the~~ an interaction metric between retail items into memory;

means for optimizing placement of nodes and edges pursuant to the interaction metric, wherein nodes represent retail items and edges represent interactions between retail items; and

means for generating a graphical representation of the nodes and edges with corresponding interaction metrics.

13.   (Original) A system for graphically displaying and optimizing interaction data between items in a retail setting, the system comprising:

a general purpose computer having memory capable of operating pursuant to instructions from an algorithm, wherein the algorithm further comprises the steps of:

accessing and operating on interaction correlations calculated between items for sale;

optimizing placement of nodes and edges pursuant to the interaction correlations, wherein nodes represent retail items and edges represent interactions between retail items, wherein crossings between one or more edges is minimized and the distance between linked nodes is minimized; and

generating a graph of the nodes and edges, wherein the corresponding interaction correlations are associated with each node and edge.

14.   (Currently amended) A method for graphically illustrating correlations between items offered for sale, the method comprising:

importing interaction metrics between retail items into a memory device;

optimizing placement of nodes and edges pursuant to the interaction metrics wherein nodes represent retail items and edges represent interactions between retail items; and

generating a graphical representation of the nodes and edges with corresponding interaction metrics.

15.   (Original) The method for graphically illustrating correlations between items according to Claim 14; wherein the interaction metric is a conditional probability.

16.   (Original) The method for graphically illustrating correlations between items according to Claim 14; wherein the interaction metrics comprise at least one of a cross-elasticity and cross-correlation between two different variables.

17.   (Original) The method for graphically illustrating correlations between items according to Claim 14; wherein the optimum placement of nodes and edges adheres to at least one of minimizing number of crossings between edges, distance between linked nodes is minimized, graph area is minimized, horizontal and vertical symmetries are maximized, and an angle between two edges onto a node is greater than or equal to a predetermined constant.

18.   (Previously Presented) The system for graphically displaying and optimizing interaction data according to Claim 1, wherein there are multiple paths from at least one node to at least one other node.